Claims:

1. Method of preparing a virus-safe pharmaceutical composition of a biologically active protein selected from the group of interferons, comprising the steps of

- adding to a solution of the protein a non-ionic detergent in an efficient amount to provide an extended shelf-life of the pharmaceutical composition,
- subjecting the solution containing the non-ionic detergent to filtration on a virus removal filter with a pore size of 10 to 40 nm; and
- recovering the filtrate.

2. The method according to claim 1, wherein the non-ionic detergent is selected from the group consisting of polyoxyethylene sorbitan mono-oleate, polyoxyethylene sorbitan monolaurate and polyoxyethylene lauryl ether.

3. The method according to claim 2, wherein the non-ionic detergent comprises polyoxyethylene sorbitan mono-oleate (polysorbate 80), which is added in an amount exceeding the critical micellar concentration.

4. The method according to claim 3, wherein polysorbate is added in an amount of 0.05 to 1 g/l.

5. The method according to any of claims 1 to 4, wherein the pharmaceutical composition comprises the solution of purified α-interferon.

6. The method according to ~~any of claims 1 to~~ 5, wherein the activity of the α-interferon solution before virus filtration is in the range of 3 to 50 mill. IU/ml.

7. The method according to claim 5 ~~or 6,~~ wherein the pharmaceutical composition comprises an α-interferon solution containing at least one α-interferon subtype selected from the group consisting of α1, α2, α4, α7, α8, α10, α14, α17 and α21.

8. The method according to ~~any of the preceding~~ claims, comprising preparing a pharmaceutical composition comprising purified leukocyte or lymphoblastoid α-interferon essentially in the absence of α-interferon polymers and albumin-interferon complexes.

9. The method according to ~~any of the preceding claims~~ Claim 1, comprising prefiltering a proteineous solution with a 0.04-0.2 μm filter, then filtering it with a virus removal filter having a pore size of 10-40 nm, and finally subjecting the filtrate to sterile filtration, and recovering the filtrate.

10. The method according to ~~any of claims 1 to 8~~ Claim 1, comprising sterile filtering a proteineous solution and subsequently subjecting the filtrate of the sterile filtration to virus removal filtration with a filter having a pore size of 10 to 40 nm, and recovering the filtrate.

11. The method according to ~~any of claims 1 to 10~~ Claim 1, comprising using a virus removal filter capable of reducing the concentration of model viruses having a size of ca 20 to ca 40 nm with at least 4 log during a spiking test.

12. Method of stabilizing pharmaceutical compositions of purified leukocyte α-interferon subjected to filtration on a virus removal filter, comprising using a polysorbate as a stabilizer.

13. A virus-safe α-interferon composition, comprising a non-ionic detergent as a stabilizer in an amount exceeding the critical micellar concentration of the detergent and being essentially free from substances and agents retained on a virus-filter having a high virus retentive capacity even for small non-enveloped viruses.

14. The composition according to claim 13, comprising an α-interferon solution containing at least one α-interferon subtype selected from the group consisting of α1, α2, α4, α7, α8, α10, α14, α17 and α21, and containing a polysorbate as a stabilizer in an amount of 0.05 to 1 g/l.

15. The composition according to claim 1, comprising an α-interferon solution containing at least two α-interferon subtypes selected from the group consisting of α1, α2, α4, α7, α8, α10, α14, α17 and α21.